

MSP3880-U
MSP3880-W

PCI 56K MODEM

User's Manual

Version 1.2

PAN EUROPEAN APPROVAL REGULATORY NOTE

The equipment has been approved under CTR21. For such product, the following statement is required :

“This equipment has been approved in accordance with Council Decision 98/482/EC for Pan European single terminal connection to the Public Switched Telephone Network (PSTN). However, due to differences between the individual PSTNs provided in different countries the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance”

“Dieses Geraet wurde gemaess der Entscheidung 98/482/EG des Rates europaweit zur Anschaltung als einzelne Endeinrichtung an das oeffentliche Fernsprechnetzzugelassen. Aufgrund der zwischen den oeffentlichen Fernsprechnetzen verschiedener Staaten bestehenden Unterschiede stellt diese Zulassung an sich jedoch keine unbedingte Gewaehr fuer einen erfolgreichen Betrieb des Geraets an jedem Netzabschlusspunkt dar.

Falls beim Betrieb Probleme auftreten, sollten Sie sich zunaechst an ihren Fachhaendler wenden.”

«Cet équipement a reçu l'agrément, conformément à la décision 98/482/CE du Conseil, concernant la connexion paneuropéenne de terminal unique aux réseaux téléphoniques publics commutés (RTPC). Toutefois, comme il existe des différences d'un pays à l'autre entre les RTPC, l'agrément en soi ne constitue pas une garantie absolue de fonctionnement optimal à chaque point de terminaison du réseau RTPC.

En cas de problème, vous devez contacter en premier lieu votre fournisseur.»

«La presente apparecchiatura terminale è stata approvata in conformità della decisione 98/482/CE del Consiglio per la connessione paneuropea come terminale singolo ad una rete analogica PSTN. A causa delle differenze tra le reti dei differenti paesi, l'approvazione non garantisce però di per sé il funzionamento corretto in tutti i punti di terminazione di rete PSTN.

In caso di problemi contattare in primo luogo il fornitore del prodotto.»

«Este equipo ha sido homologado de conformidad con la Decisión 98/482/CE del Consejo para la conexión paneuropea de un terminal simple a la red telefónica pública conmutada (RTPC). No obstante, a la vista de las diferencias que existen entre las RTPC que se ofrecen en diferentes países, la homologación no constituye por sí sola una garantía incondicional de funcionamiento satisfactorio en todos los puntos de terminación de la red de una RTPC.

En caso de surgir algún problema, procede ponerse en contacto en primer lugar con el proveedor del equipo.»

“Dit apparaat is goedgekeurd volgens Beschikking 98/482/EG van de Raad voor de pan-Europese aansluiting van enkelvoudige eindapparatuur op het openbare geschakelde telefoonnetwerk (PSTN). Gezien de verschillen tussen de individuele PSTN's in de verschillende landen, biedt deze goedkeuring op zichzelf geen onvoorwaardelijke garantie voor een succesvolle werking op elk PSTN-netwerkaansluitpunt.

Neem bij problemen in eerste instantie contact op met de leverancier van het apparaat.”

Network Compatibility Declaration

This product is designed to interwork with the Public Switched Telecommunication Networks in UK, Ireland, Netherlands, Sweden, Denmark, Finland, Switzerland, Luxembourg, Belgium, France, Germany, Spain, Portugal, Iceland, Greece, Italy, Norway and Austria.

P/N: 040-512397-121 (Feb 2001)

Product warranty does not apply to damage caused by lightning, power surges or wrong voltage usage.

NEW ZEALAND TELECOM WARNINGS

General

"The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services."

"This equipment does not fully meet Telecom's impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances."

"This equipment shall not be set up to make automatic calls to the Telecom '111' Emergency Service."

"If a charge for local calls is unacceptable, the 'Dial' button should NOT be used for local calls. Only the 7-digits of the local number should be dialled from your telephone. DO NOT dial the area code digit or the '0' prefix."

"This equipment may not provide for the effective hand-over of a call to another device connected to the same line."

"Important Notice

Under power failure conditions, this telephone may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use."

"Some parameters required for compliance with Telecom's Telepermit requirements are dependent on the equipment (PC) associated with this device. The associated equipment shall be set to operate within the following limits for compliance with Telecom's Specification :-

1. (a) There shall be no more than 10 call attempts to the same number within any 30 minute period for any single manual call initiation, and
(b) The equipment shall go on-hook for a period of not less than 30 seconds between the end of one attempt and the beginning of the next attempt.
2. Where automatic calls are made to different numbers, the equipment shall go on-line for a period of not less than 5 seconds between the end of one attempt and the beginning of the next attempt.
3. The equipment shall be set to ensure that calls are answered between 3 and 30 seconds of receipt of ringing."

"All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is to be aware that it is being recorded. In addition, the Principles enumerated in the Privacy Act 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is used and what is disclosed to any other party."

WARNING

Before installing the Modem card ensure the PC is switched OFF and the mains cord removed. If servicing the Modem card ensure the PC is switched OFF, the mains cord unplugged and the Telecommunications Line cord is disconnected from the Modem Card.

EUROPEAN NETWORK COMPATIBILITY DECLARATION

This product is designed to interwork with the Public Switched Telecommunication Networks in UK, Ireland, Netherlands, Sweden, Denmark, Finland, Switzerland, Luxembourg, Belgium, France, Germany, Spain, Portugal, Iceland, Greece, Italy, Norway and Austria.

The equipment may have interworking difficulties in PSTN networks in other countries. Please contact your equipment supplier if it is desired to use the equipment on another network.

Electrical Safety

Before installing this equipment you must ensure that the power drawn by this card, together with the host and any auxiliary cards drawing power from the host, is within the rating of the host power supply.

The equipment must be installed such that with the exception of the connections to the host, clearance and creepage distances shown in the table below are maintained between the card and any other assemblies that use or generate a voltage shown in the table.

The larger distance shown in brackets applies where the local environment within the host is subject to conductive pollution or dry non-conductive pollution which could become conductive due to condensation. Failure to maintain these minimum distances would invalidate the approval.

Clearance	Creepage (mm)	Voltage used or Generated by Host or Other Cards
2.0	2.4 (3.8)	Up to 50 Vrms or Vdc
2.6	3.0 (4.8)	Up to 125 Vrms or Vdc
4.0	5.0 (8.0)	Up to 250 Vrms or Vdc
4.0	6.4 (10.0)	Up to 300 Vrms or Vdc

The analogue telecommunications interface is intended to be connected to telecommunication network voltage (TNV) circuits which may carry dangerous voltages. The telephone cord must remain disconnected from the telecommunications system until the card has been installed within a host which provides the necessary protection of the operator.

If it is subsequently desired to open the host equipment for any reason, the telephone cord must be disconnected prior to effecting access to any internal parts which may carry telecommunication network voltages.

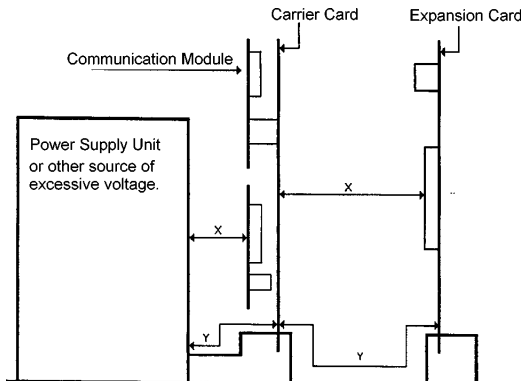
Safety level of the various connectors:

- Telephone Line Connector = TNV3
- PCI connector = SELV

These indications are classified as per safety standards EN60950/A4:

- TNV3: Telecommunications Network Voltage
- SELV: Safety Extra Low Voltage

Except for the edge connector which plugs into the host's expansion slot, clearance distance (Xmm) and creepage distance (Ymm) as given in the above table, must be maintained between the communication card and any other assemblies which use or generate a hazardous voltage.



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Preface

*This manual covers the models **MSP3880-U** and **MSP3880-W**.*

This manual gives you a step-by-step guide of the following:

1. Installation of your modem card to your computer
2. Connection to the phone line for internet
3. Installation of modem drivers required to run the modem
4. Testing of the modem and setting the country
5. Deinstalling the Modem Card's drivers

To help you clear your doubts and possible problems you may face when using your modem, we include the sections - ***Frequently Asked Questions (FAQ)*** and ***Troubleshooting Guide***. These sections will provide the answers to some of the commonly asked questions on your modem as well as guide you along to solve problems that you may encounter.

For further technical details on your card, you may refer to the **ReadMe.txt** file found in your **Installation CD**.

Chapter 1



Introduction

Congratulations on your purchase of the 56K PCI Modem!

With the 56K PCI Modem alone, you can perform a comprehensive range of modem-related functions including data communications, sending and receiving of faxes.

The intensive demands of today's Internet applications will no longer be a bottleneck. Using the 56K PCI Modem, you can now download graphic intensive web pages, high bandwidth audio and video files as well as large file size software programs at speeds of up to 56Kbps.

Chapter

2

Before You Begin

This chapter contains information that you need to know before installing your modem card. They are the basic system requirements needed for your modem card to run, the safety rules to follow, as well as the installation guidelines.

2.1 Minimum System Requirements

- IBM PC-based computer with Pentium® 200 MMX processor
- PCI Bus slot
- 16MB RAM (32 MB for Windows® Me/64 MB for Windows® 2000)
- 10MB hard disk space (system files and modem drivers only)
- CD-ROM drive
- Windows® Me / 98 / 95 / 2000 / NT® 4.0

2.2 Safety Precaution

- Do not remove your card from its protective bag until you are ready to install it.
- Always try to hold your card by its edges. Avoid touching any electronic components on your card.
- Static electricity can cause permanent damage to your card. To prevent such a damage, you must ground yourself during the installation:
 - » Use a grounding strap - a coiled wire with a clip at one end and an elastic strap at the other. Wear the strap around your wrist and attach the clip to any non-painted metal surface of your computer chassis.
 - » If you do not have a grounding strap, touch any non-painted surface of your computer chassis before you begin installation, and again every minute or so until the installation is completed.

2.3 Installation Notes

- Computers vary in configuration, appearance and layout. Therefore, the installation procedures in this manual apply generally and you should compare the illustrations here with your computer.
- A Philips screwdriver is required.
- The documentation for your computer should come in handy during the installation. Have it ready with you.
- If you have an existing *non* Plug-and-Play modem installed in your computer, you must first un-install its modem drivers before you remove the card. Refer to the documentation of your existing modem for details.

If your existing modem is Plug-and-Play, you may proceed to install your new modem.

Chapter

3

Setting Up Your Modem Card

This chapter contains information on how to install the modem card and the telephone line to your computer.

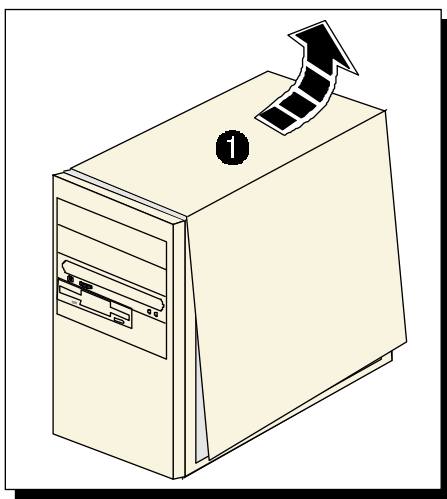
3.1 Installing the Modem Card



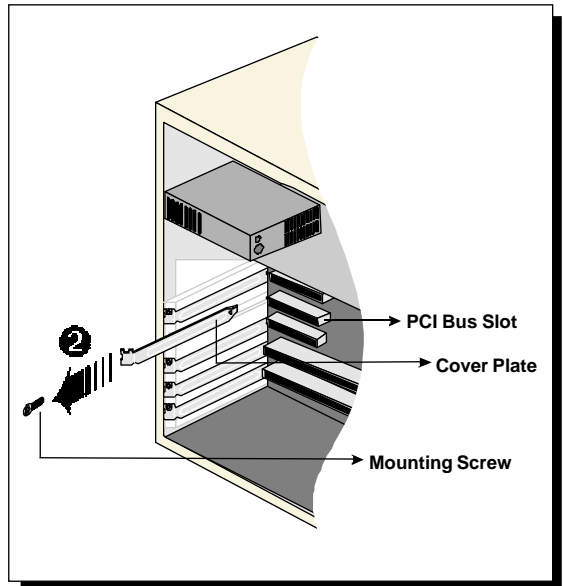
You need to remove any existing modem installed in your computer. If your modem is non Plug-and-Play, you need to un-install its modem drivers before you remove it. Check your existing modem documentation for details on this.

Power off your computer and any connected devices before installing your modem!

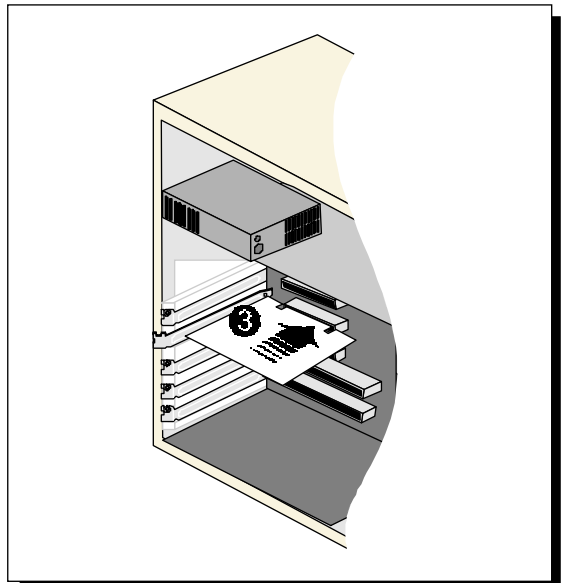
- 1 Remove the cover of your computer.



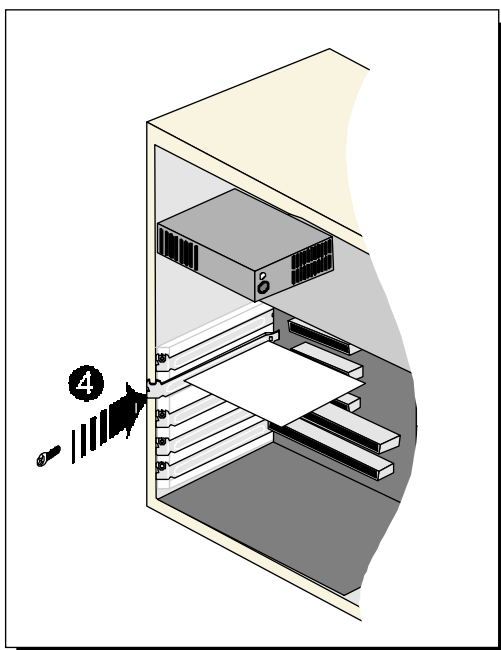
- 2 Select an available PCI Bus slot and remove its cover plate. Keep the mounting screw to secure your card later.



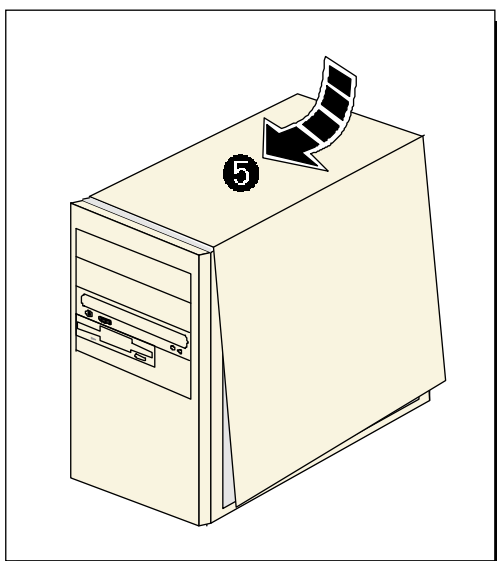
- 3 Align your card with the selected PCI Bus slot and firmly push it into the slot. If the card does not slide in, do not force it. Make sure that the card is lined up properly and try again.



- 4 Secure your card to your computer chassis with the mounting screw.

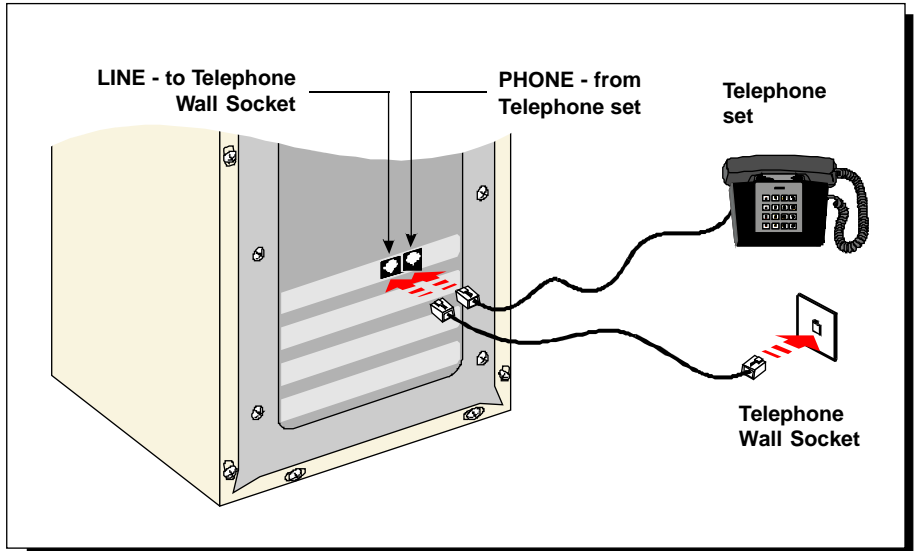


- 5 Replace the cover of your computer.



3.2 Connecting the Modem Card

3.2.1 For MSP3880-U users



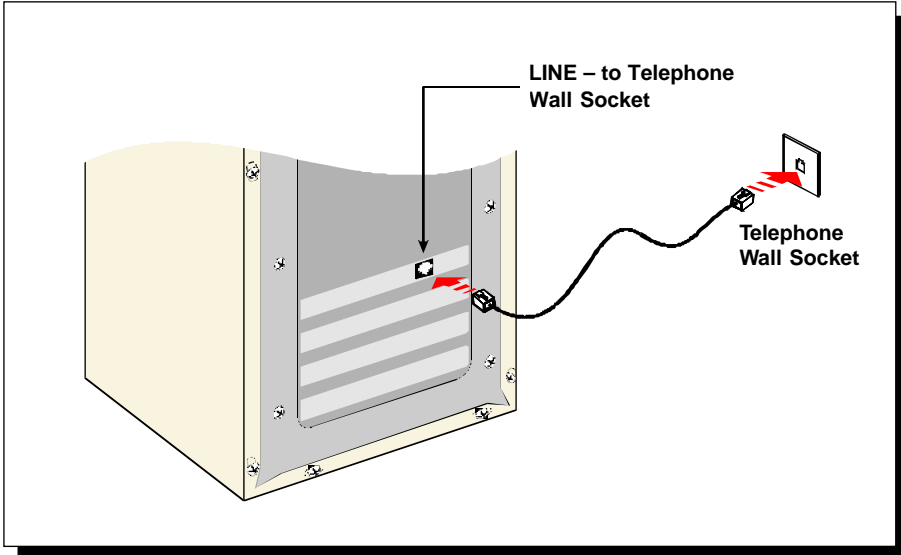
❶ Connect one end of the **telephone extension cord** to the modem card and the other end to the **telephone wall socket**.

❷ Connect a **telephone set** to the modem card.

(This optional connection eliminates the need to switch between your telephone set and your modem card if they are sharing the same telephone wall socket)

This completes the setting up of your modem. Please proceed to the next chapter to install your modem drivers.

3.2.2 For MSP3880-W users



- 1 Connect one end of the **telephone extension cord** to the modem card and the other end to the **telephone wall socket**.

This completes the setting up of your modem. Please proceed to the next chapter to install your modem drivers.

Chapter 4

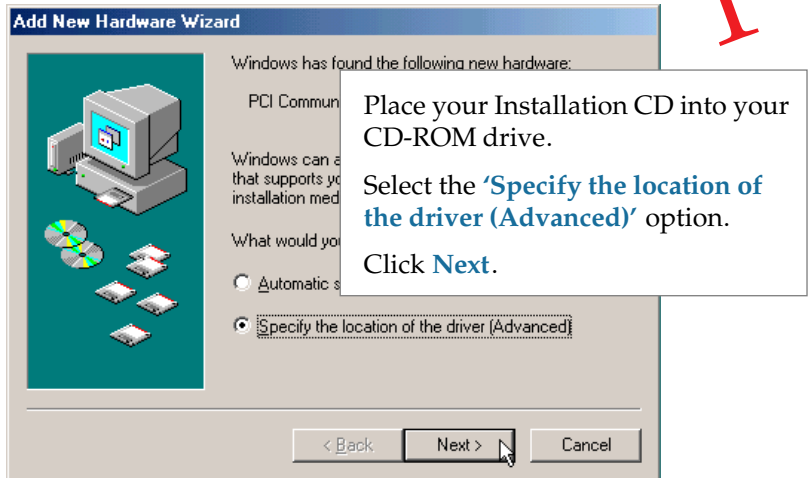
Installing the Modem Drivers

This chapter contains information on how to install the modem drivers under Windows® Me/98/95/2000 and Windows NT® 4.0.

4.1 For Windows® Me

(The following screen shots are taken from the MSP3880-W modem card)

Power on your computer to start Windows® Me. Windows® Me will detect the newly installed modem and an **Add New Hardware Wizard** window will appear.



2

Select the **'Specify a location'** option. Browse to the **'Winme'** directory on the CD-ROM where the drivers can be found. Click **Next**.

3

Windows will prompt that the drivers have been found. Click **Next** to install.

4

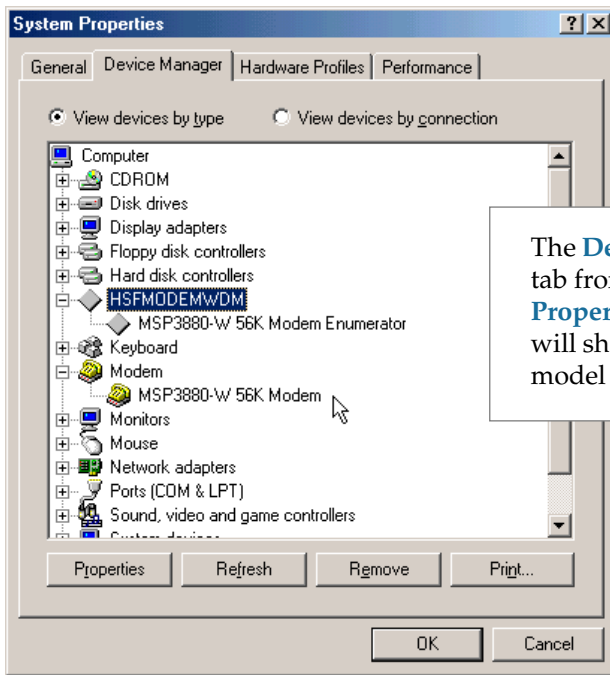
Click **Finish**.

The image shows three sequential screenshots of the Windows 'Add New Hardware Wizard' during the installation of a modem driver.

Step 2: The wizard is at the 'Specify a location' step. It shows options to search for the best driver (recommended) or specify a location. The 'Specify a location' option is selected, and the location is set to 'D:\Winme'. A 'Browse' button is visible. A callout box instructs the user to select this option, browse to the 'Winme' directory on the CD-ROM, and click 'Next'.

Step 3: The wizard has found the driver, 'MSP3880-W 56K Modem Enumerator'. It shows the location of the driver as 'D:\Winme\BRDG4055.INF'. A callout box instructs the user to click 'Next' to install.

Step 4: The wizard shows the 'MSP3880-W 56K Modem Enumerator' installed. A callout box instructs the user to click 'Finish'.

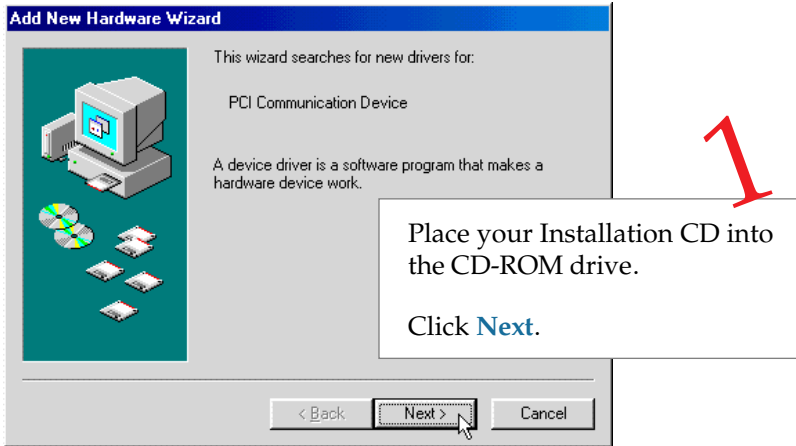


This completes the installation of the modem drivers in Windows® Me. Proceed to the next chapter to test your modem.

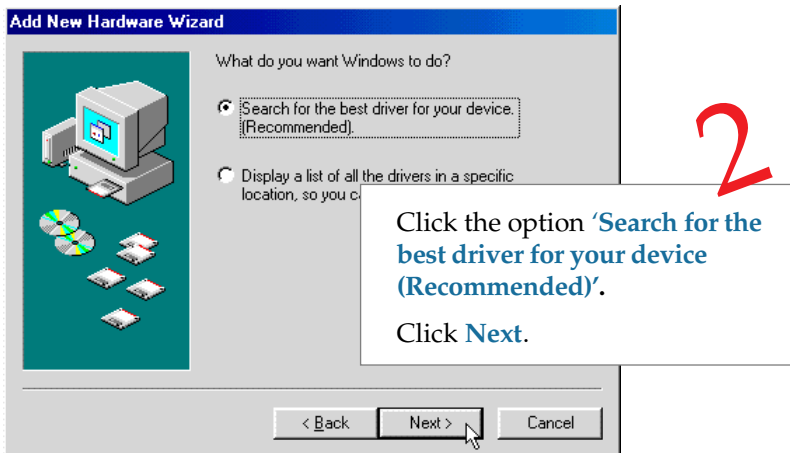
4.2 For Windows® 98

(The following screen shots are taken from the MSP3880-W card)

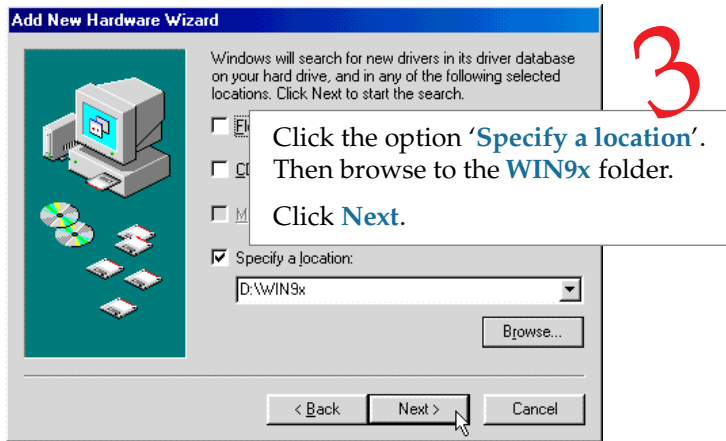
Power on your computer to start Windows® 98. Windows® 98 will detect the newly-installed modem and an **Add New Hardware Wizard** window will appear.



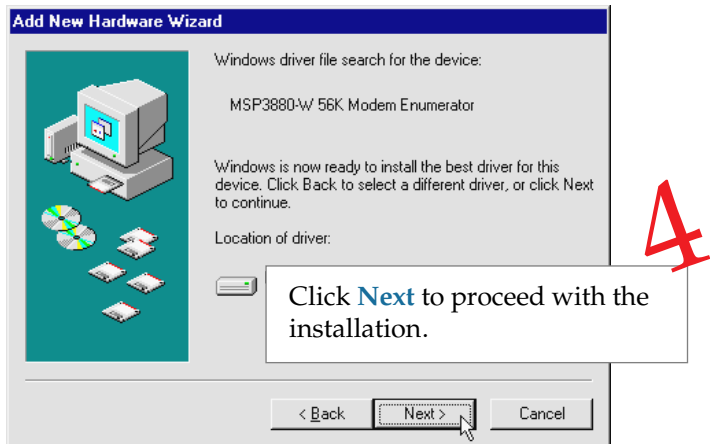
The next window prompt will ask for your modem drivers.



The following window will prompt for the source of your drivers.



Windows will prompt that it has located the driver.



To complete the drivers installation, click **Finish**.

You may be prompted to select the country that you are currently in.



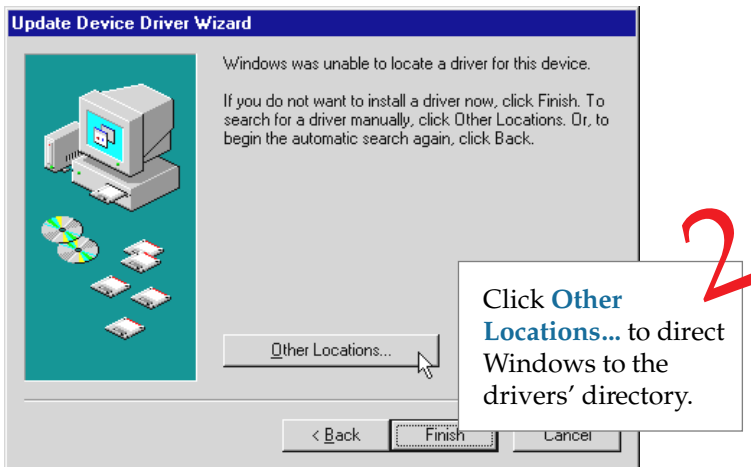
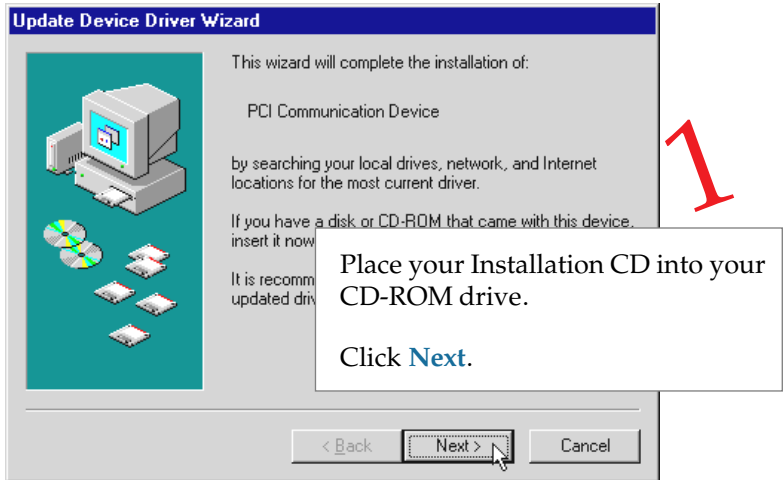
Restart your system if prompted.

This completes the installation of the modem drivers in Windows® 98. Proceed to the next chapter to test your modem.

4.3 For Windows® 95

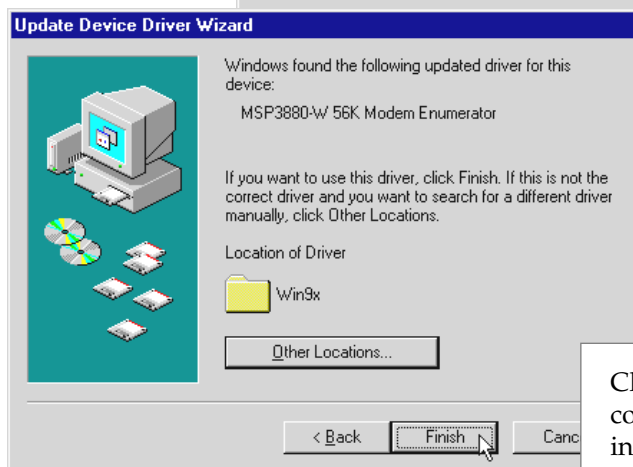
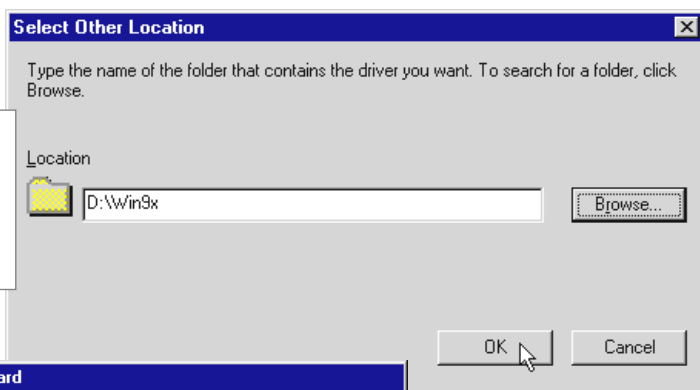
(The following screen shots are taken from the MSP3880-W modem card)

Power on your computer to start Windows® 95. Windows® 95 will detect the newly installed modem and an **Update Device Driver Wizard** window will appear.



3

Browse to the **Win9x** folder on your CD-ROM and click **OK**.



Windows® 95 will now prompt you that the modem drivers have been found.

4

Click **Finish** to continue with the installation.



5

When system prompts for the Installation CD, click **OK**.

The **Copying Files...** window will appear.



You may be prompted to select the country that you are currently in.

Restart your system, if prompted.

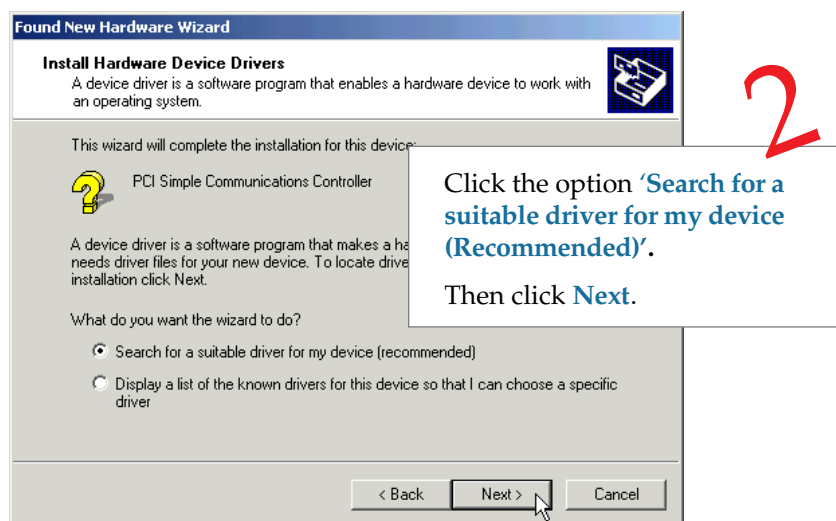
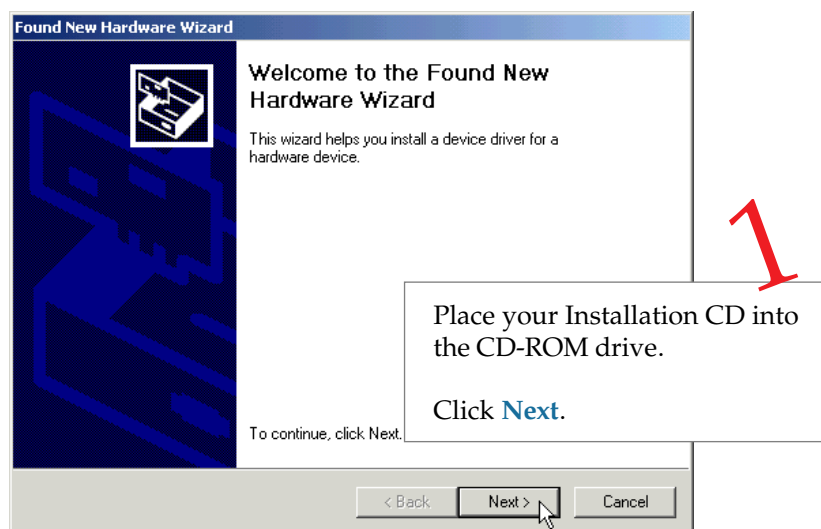
This completes the installation of the modem drivers in Windows® 95. Proceed to the next chapter to test your modem.

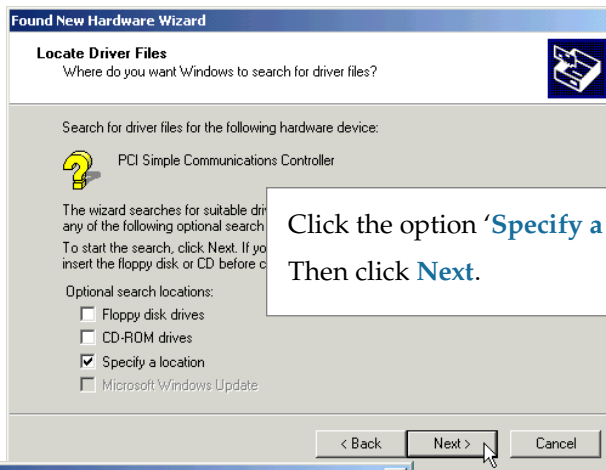


4.4 For Windows® 2000

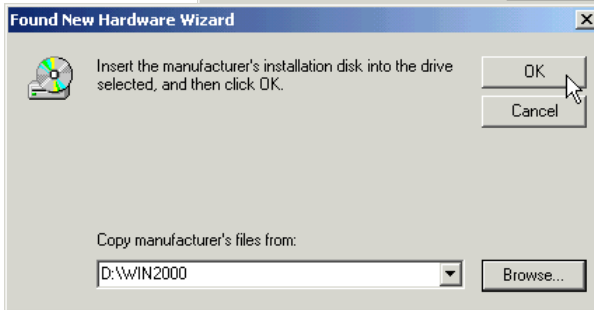
(The following screen shots are taken from the MSP3880-W card)

Power on your computer to start Windows® 2000. Windows will detect the newly-installed modem card and a **Found New Hardware Wizard** window will appear.

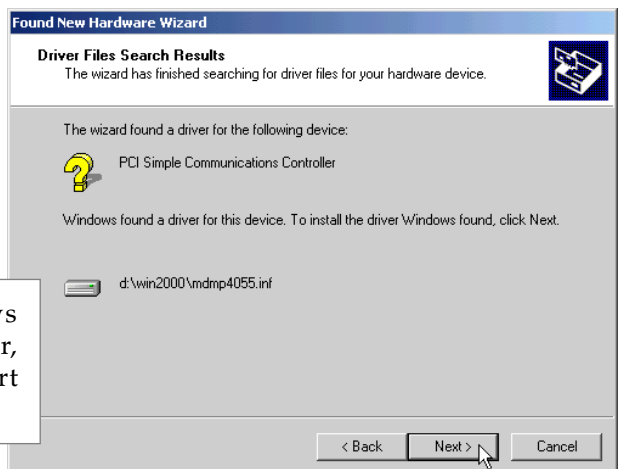




Click the option '**Specify a location**'.
Then click **Next**.



Browse to the **Win2000** folder on your CD-ROM and click **OK**.



When Windows found the driver, click **Next** to start the installation.



6

Depending on your driver version, a **Digital Signature Not Found** window may appear. Click **Yes** to continue.

Click **Finish** when installation is completed.

Restart your system, if prompted.

This completes the installation of the modem drivers in Windows® 2000. Proceed to the next chapter to test your modem.

4.5 For Windows NT® 4.0

1. Start Windows NT®.
2. Place your Installation CD into the CD-ROM drive.
3. From the Windows taskbar, click **Start** > **Run...**
4. In the **Run** text box, type "**D:\Winnt40***\setup.exe"
(Assuming your CD-ROM drive is **D**. If not, substitute drive letter accordingly)

* For users of MSP3880-U, type **U**
For users of MSP3880-W, type **W**

Click **OK**.
5. Click the **Next** button and select the **Product Name** from the **Modem Board Installation Wizard**.
6. Follow any on-screen instructions to complete the software installation.

This completes the installation of the modem drivers in Windows NT® 4.0. Please proceed to the next chapter to test your modem.

Chapter 5

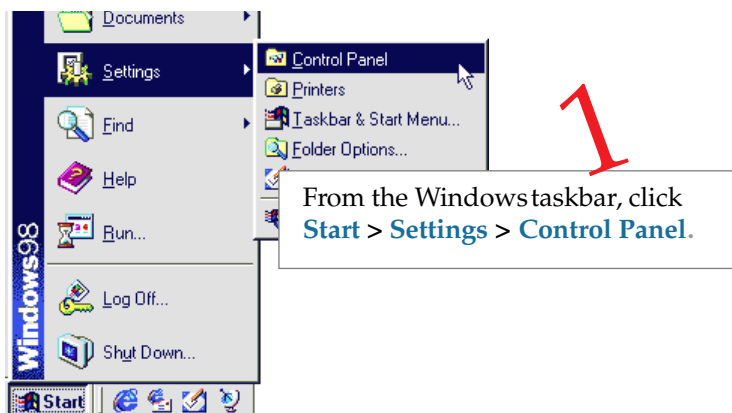
Testing the Modem Card & Setting the Country

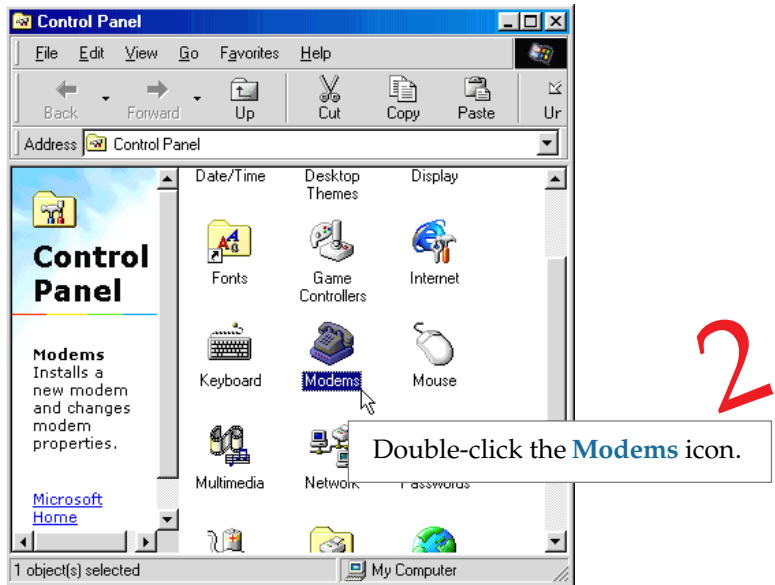
This chapter contains information on how to test your modem card in Windows® Me/98/95/2000 & Windows NT® 4.0.

5.1 Windows® Me/98/95

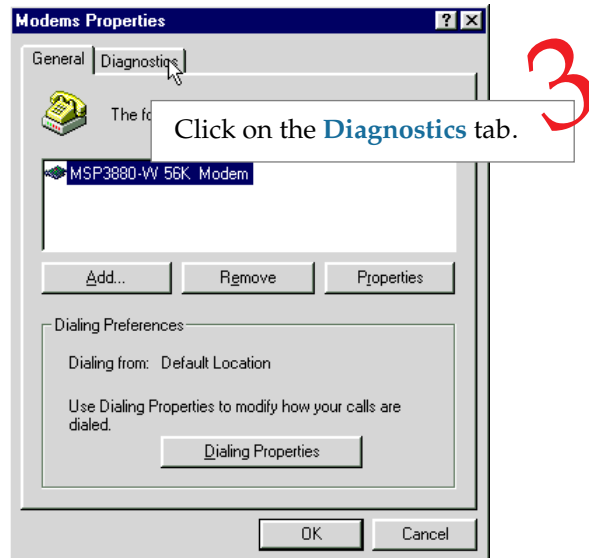
(The following illustrations are based on the model MSP3880-W, in the Windows® 98 environment.)

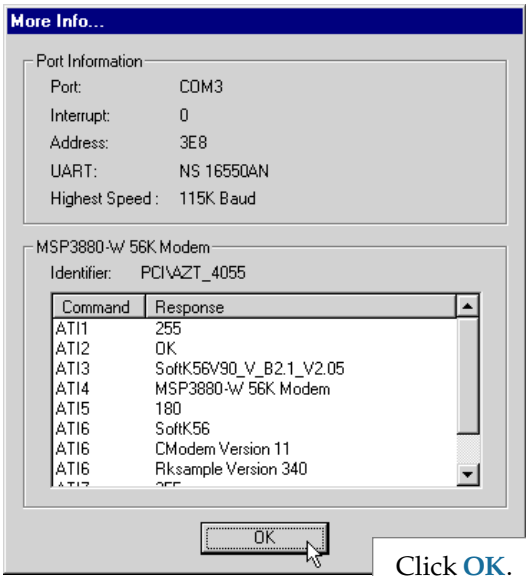
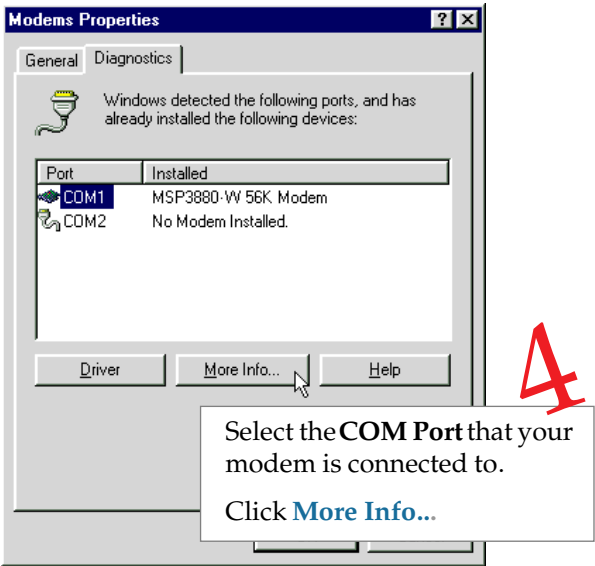
5.1.1 Testing the modem





You will see the MSP3880 modem listed.





(The Port Information shown here may differ from what you see on your computer. It is determined by the COM Port which you connect your modem to)

The **More Info...** window will appear, showing a list of AT commands. This indicates a successfully-installed modem.

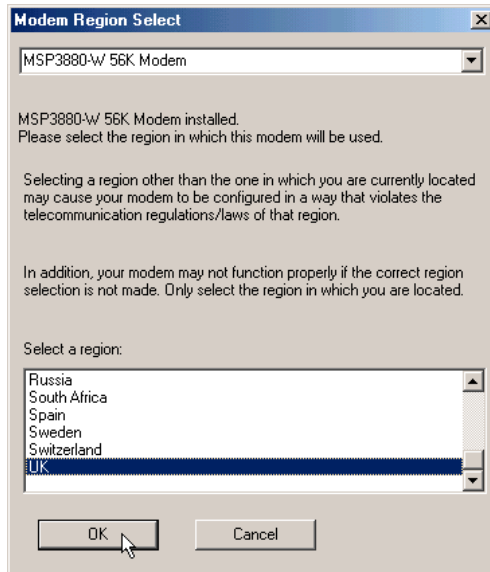
If your modem is not installed properly, the set of AT commands will not be listed. You may also be prompted by an error message, stating that it was unable to open the COM Port. If this happens, refer to the *Appendix B - Troubleshooting Guide* “While testing the modem, the system gave an error message stating that it was unable to open the COM Port.”

5.1.2 Setting the Country

Ensure that the country setting is correct for your location. In some cases, the country is set to match the Operating System selected and re-selection is required to match your exact location. To change the current setting, do the following:

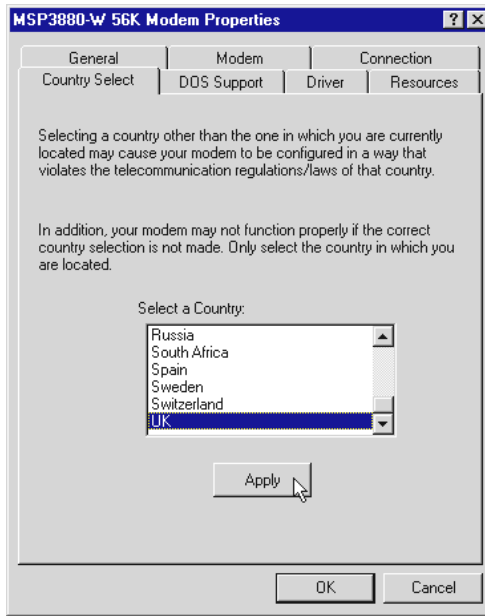
Windows® Me

1. From the Windows taskbar, click **Start> Settings>Control Panel**.
2. Double-click on the **HSF Modem Region Select** icon.
3. Change it to the country that you are currently in and click **OK**.



Windows® 98/95

1. From the desktop, right-click on the **My Computer** icon and select **Properties**.
2. Click the **Device Manager** tab and double-click on **Modem**.
3. Select your product model and click **Properties**.
4. Click the **Country Select** tab. Select the country that you are currently in and click **Apply**.

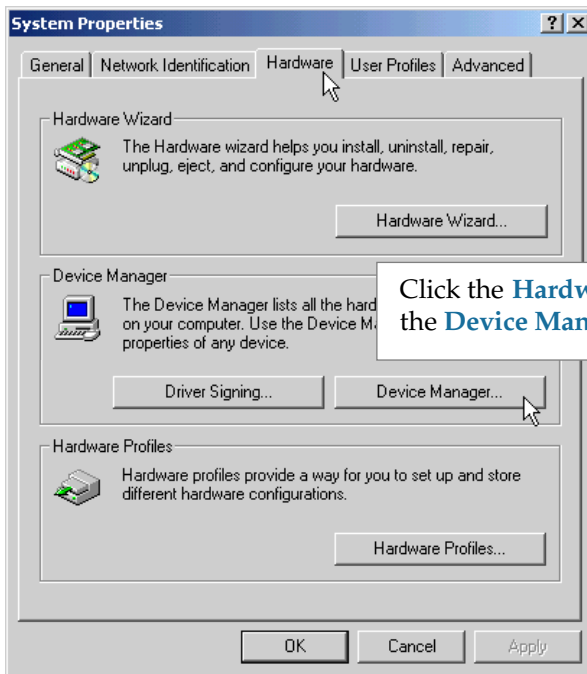


5.2 Windows® 2000

(The following illustrations are based on the model MSP3880-U.)

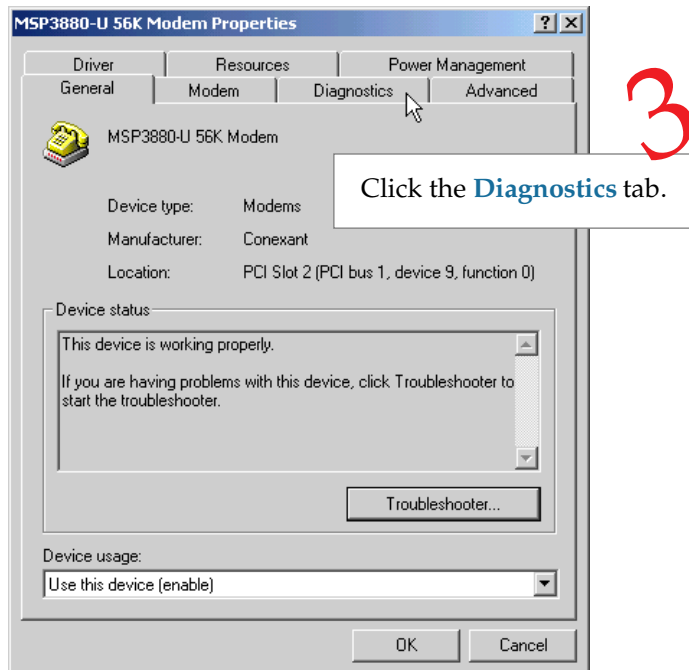
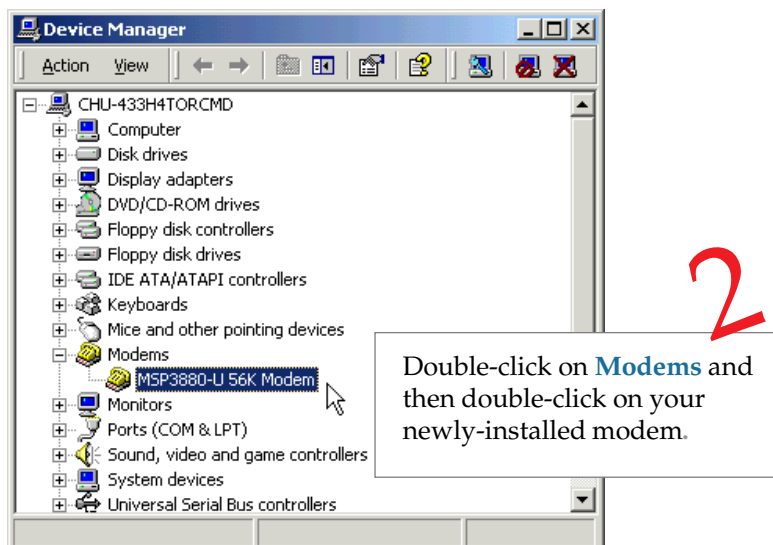
5.2.1 Testing the modem

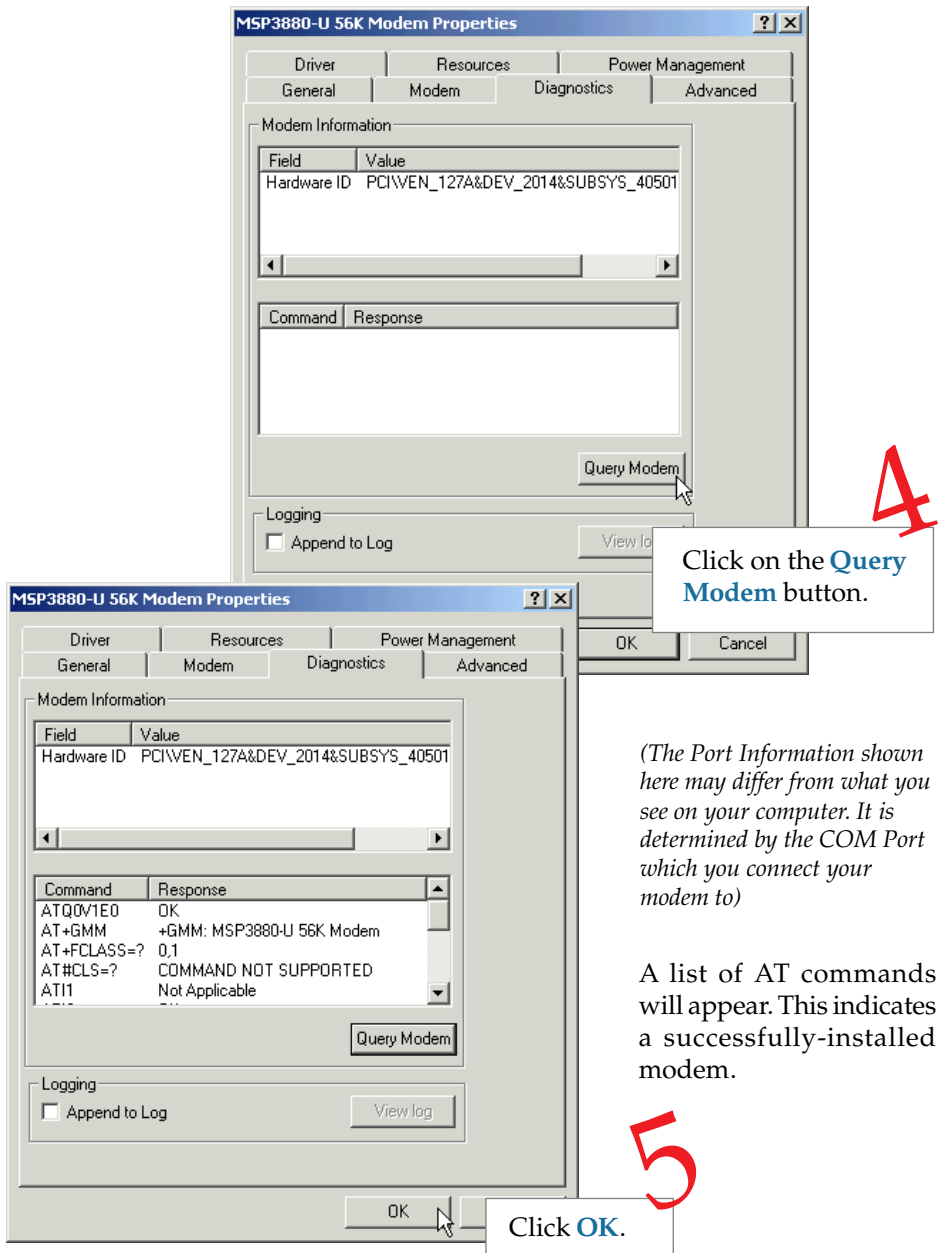
From the Windows desktop, right-click on the **My Computer** icon and choose **Properties**.



Click the **Hardware** tab and then the **Device Manager...** button.

The **Device Manager** window will appear.





5.2.2 Setting the Country

Ensure that the country setting is correct for your location. In some cases, the country is set to match the Operating System selected and re-selection is required to match your exact location. To change the current setting, do the following:

1. From the Windows taskbar, click **Start**> **Settings**>**Control Panel**.
2. Double-click on the **HSF Modem Country Select** icon.
3. Change it to the country that you are currently in.

5.3 Windows NT® 4.0

5.3.1 Testing the modem

1. From the Windows taskbar, click **Start** > **Programs** > **Accessories** > **HyperTerminal** > **HyperTerminal**.
2. Key in the required information prompted by the dialog boxes.
3. Click **OK** after entering any telephone number in the dialog box.
4. At the next dialog prompt, click **Cancel**.
5. Type "**AT**" and press **Enter**. You should see a response, **OK**.
6. Your modem is now ready to run.

5.3.2 Setting the Country

1. From the Windows taskbar, click **Start**> **Settings**>**Control Panel**.
2. Double-click on the **HSF Modem Country Select** icon.
3. Change it to the country that you are currently in.

Chapter

6



Deinstalling the Modem Card

6.1 Windows® Me/98/95

From the **Control Panel**, double-click **Add/Remove Programs**. Select your newly-installed modem and then click the **Add/Remove...** button.

6.2 Windows® 2000

From the desktop, right-click on the **My Computer** icon and choose **Properties**. Click the **Hardware** tab and then the **Device Manager...** button. Select your modem and then click the **Add/Remove...** button.

The **Device Manager** window will appear. Double-click on **Modems** and then right-click on your newly-installed modem. Choose **Uninstall**.

6.3 Windows NT® 4.0

From the **Control Panel**, double-click **Add/Remove Programs**. Select your newly-installed modem and then click the **Next** button twice. Click **Finish** and then **Yes** to restart.

Frequently Asked Questions

This section provides the answers to some of the commonly asked questions on your modem.



How do I identify MSP3880 modem and its driver version ?



The model of your card is printed on the serial number label located at the rear of the modem card. To get the driver version, you can also issue an ATI3 command using any telephony Data terminal application.



What is V.90 ?



V.90 is a new standard approved by the International Telecommunication Union for "56K" analog modems. It is a compromise officially reached between the two competing standards - X2 (from 3COM/USR) and K56Flex (from Rockwell/Lucent).



What resources does MSP3880 use ?



*Depending on system, the resources used is either **IRQ9**, **IRQ10** or **IRQ11** for systems that have two COM ports. If the system has only one COM port, **IRQ3** may be used.*



Will MSP3880 work on all motherboards?



Yes, if the motherboard has at least one free PCI slot and meets the minimum system requirements.



What is the maximum speed that the modem supports and which solution is this card using?



The MSP3880 modem supports up to 56kbps. It is also backward compatible with most of the old standards. The MSP3880 uses Rockwell SoftK56 chipset solution.



Is this modem upgradable to ITU V.90 56k standard?



This is a V.90 ready modem. You may also visit our website to get the latest updates on the release timing for the updated drivers.



Where can I get the updated driver for my modem?



You can visit our website for any updated drivers.



I do not have any application and needs to do some faxing. How do I install fax in Windows® 98?



If you are in the US, go to directory

***D:\Tools\oldwin95\message\us** (in your Windows® 98 installation CD)*

For other countries, go to

***D:\Tools\oldwin95\message\intl** (in your Windows® 98 installation CD)*

(Assuming your CD-ROM drive is D. Else substitute the drive letter accordingly)

*i) Run **wms.exe** under the directory to install Microsoft Messaging.*

*ii) Next run **awfax.exe** under the same directory to install Microsoft Fax.*

*For further information on Microsoft Messaging and Microsoft Fax, read **wms-fax.txt** (from the same directory) in your Windows® 98 CD.*



What games does MSP3880 support?



It can support almost all PC titles.



What do TAPI and Non-TAPI communication applications mean?

Generally, TAPI refers to true 32-bit communication applications. They do not access the COM ports directly but through an Interface known as TAPI system of Windows (Not Windows 3.1x).

Non-TAPI applications are also referred to as 16-bit communication applications. They access the COM ports directly. Windows® 95/98 supports both TAPI and Non-TAPI communication applications.



I am using my system with the card in another country. Is there any settings that need to be changed ?

Yes. You need to ensure that the country setting for your modem card is correct for your location. Carry out the following steps:

Windows 98/95

- i) From the desktop, right-click on the **My Computer** icon and select **Properties**.
- ii) Click the **Device Manager** tab and double-click on **Modem**.
- iii) Select your product model and click **Properties**.
- iv) Click the **Country Select** tab. Select the country that you are currently in.

Windows Me

- i) From the Windows taskbar, click **Start > Settings > Control Panel**.
- ii) Double-click on the **HSF Modem Region Select** icon.
- iii) Select the country that you are currently in.

Windows 2000/Windows NT 4.0

- i) From the Windows taskbar, click **Start > Settings > Control Panel**.
- ii) Double-click on the **HSF Modem Country Select** icon.
- iii) Select the country that you are currently in.



How do I see the resources listings ?



Windows Me/98/95

- i) From Windows desktop, right-click **My Computer** and then **Properties**.
- ii) Click the **Device Manager** tab. Then double-click **Modem**.
- iii) Double-click your modem model, then click the **Resources** tab.

The IRQ (Interrupt) and memory range (Address) used by the modem will be listed.

Windows NT4.0

Not applicable.

Windows 2000

- i) From Windows desktop, right-click **My Computer** and then **Properties**.
- ii) Click the **Hardware** tab. Then click the **Device Manager...** button.
- iii) Double-click **Modems**. Then double-click your modem model from the list. Click the **Resources** tab.

The IRQ (Interrupt) and memory range (Address) used by the modem will be listed.



Why is the default maximum speed in the Device Manager Properties for MSP3880 showing 115200 ?



It is referring to the DTE speed which is the speed of data transfer between Computer and Modem. This however will not have any effect on the maximum speed for DCE, which is the speed of data transfer between Modem to ISP or remote party.

Appendix

B

Troubleshooting Guide

This section provides a step-by-step solutions to problems that you may encounter when using your modem.



This modem is set to V.90. But why am I getting slow connections to my ISP ?



The majority of the telephone lines and ISP are already supporting V.90 connections. However, like all data connection, the connection is sensitive to the amount of noise present in the phone line. Hence, only very "clean" phone line can get high connection rate or throughput. You may want to check with your telephone service provider.



The modem hangs up when an incoming call is received.



Disable the Call Waiting function for the Online Service, Internet Connection and/or communications software you are using.



When I tried to dial out, the system gave me an error message "No Dial Tone".



Check the Telephone Cable connection. If necessary, plug out and reconnect the Telephone Cable. You may have other telephony application running. Please use one telephony application at any one time.



There are incomprehensible characters appearing on the screen.



The data, parity and stop bit settings are incorrect. Try using the default values or check with your ISP.



Why does my modem always connect at 33.6Kbps and not 56Kbps or V.90 ?



*Check with your Internet Service Provider (ISP) to ensure that they support 56Kbps or V.90 connections. You must also make sure that your card is using the 56Kbps driver. For modems with Country Selection feature, please ensure that the modem is set to your local country. To set the country select feature, see **Appendix A - "I am using my system with the card in another country. Is there any setting that need to be changed ?"***



My system does not detect the modem card when I boot up for the first time.



Windows Me/98/95/2000

Make sure that your card is fully inserted into the PCI Bus slot. However, if you are sure that the card has been properly installed, do the following:

- i) From the Windows taskbar, click **Start > Settings > Control Panel**.
- ii) Double-click the **System** icon.
- iii) Click the **Device Manager** tab.
- iv) Check whether there is any yellow exclamation mark (error) on the Modem/ Sound, video and game controllers devices. If yes, select the device, click **Remove** and **OK**. Re-install the drivers.
- v) If the system still cannot detect the modem, you may wish to try using a different PCI slot instead.

Windows NT4.0

Not applicable.



I have done a diagnostics test of my modem and there is nothing wrong with it. However, when I use a communications software, there seems to be an error. Why?



Try to use a different telephony application such as Microsoft Fax to fax a document. If the sending of a fax is successful, then the fax function of your modem is working fine.

Try to use Hyperterminal to dial up to a BBS. If the connection is successful, then the data function of your modem is working fine. Try exiting the communications software and running it again.

You may try to install new version of communication software that supports higher interrupts.



I have done the Diagnostic test. However, the system gave an error message that the system is unable to open the COM Port.



Windows Me/98/95/2000

Make sure that you have closed all communication software (e.g. Hyperterminal, Dial-up Networking, etc.) when you are doing the diagnostics test.

However, if there is no communications software running, do the following:

- i) From the Windows taskbar, click **Start** > **Settings** > **Control Panel**.
- ii) Double-click the **System** icon.
- iii) Click the **Device Manager** tab.
- iv) Check whether there is any yellow exclamation mark on the modem device.
If yes, remove the modem device and re-install the modem drivers.

Windows NT4.0

Not applicable.



Why isn't there any sound from the speakers ?



Go through the following steps:

- i) Make sure that the connections from your speakers to your computer are as described in the User Manual.
- ii) If your speakers are active (amplified) speakers (with built in power supply and amplifier), make sure that it is put to "**ON**". Passive speakers (without built in power supply and amplifier) can only be used with an external amplifier.
- iii) Power from the Mains to your speakers are properly connected and powered ON.

Technical Specifications

This chapter contains the technical specifications of your card. The information may be more useful for technically inclined users.

Modem Standards

- V.90, K56Flex
- V.34+, V.34, V.32bis, V.32, V.22bis, V.22, V.21
- Bell 212A, Bell 103

Modem Data Rates

- 56Kbps (download speed from Internet Service Provider)
- 33.6Kbps — 300bps

Data Throughput

- Up to 115.2Kbps (with compression) and 57.6Kbps (without compression)

Error Correction

- V.42 LAP-M and MNP2-4

Data Compression

- V.42bis and MNP5

Fax Modulations

- V.17, V.29, V.27ter, V21 Channel 2 Class 1 and Group 3 Protocol

H.324 Video Ready

- V.80, V.8bis
- Rockwell VRPI

PCI Interface

- PCI 2.1 Interface
- PCI Plug and Play
- PCI Power Management (Wake-Up on Ring through PCI PME# support*)

** only if your system supports ACPI Power Management*



The product specifications herein are subject to change without prior notifications.

Appendix

D



AT Commands

The following is the list of AT Commands you can see after successful installation of your modem. The example used here is the MSP3880-U modem with a driver version of V2.12.10.

ATI0	HSF Soft56K Data, Fax PCI
ATI1	Not Applicable
ATI2	OK
ATI3	V2.12.10
ATI4	MSP3880-U 56K Modem
ATI5	181
ATI6	SoftK56 CModem Version 11 Rksample 11 Version 339
ATI7	Applicable
ATI8	Apr 27 2000 # 11:21:59
ATI9	US